

Antibodies used for flow cytometry analysis and cell sorting

The following anti-mouse monoclonal antibodies were used for the staining of cell surface markers: anti-mouse Sca-1(D7), CD117(2B8), IL7R α (SB199), CD45R/B220(RA3-6B2), CD24(M1/69), CD43(S7), IgM(II/41), IgD(11-26c.2a) antibodies, Annexin V apoptosis detection kit and Biotin mouse lineage panel, which consists of anti-mouse CD3e (145-2C11), CD11b (M1/70), CD45R/B220(RA3-6B2), Ly6C/G (RB6-8C5) and Ter119 antibodies, are all from BD Biosciences, San Jose, CA; CD19 (MB19-1) and CD93 (AA4.1) are from eBiosciences, San Diego, CA).

Primers used for quantitative RT-PCR are:

Ku86-F: 5'-GCGTGAAACCATAGGGAAGA-3',
Ku86-R: 5'-GTTCGATTGGAAAAGGCAAA-3';
DNA-PKcs-F: 5'-AGG TTCATACAGGCGTTTGG-3',
DNA-PKcs-R: 5'-AGG TTCATACAGGCGTTTGG-3';
Ku70-F: 5'-CCCAAGGTTGAAGCCATAAA-3',
Ku-70-R: 5'-TTACGAAAATGGGCCTTCAG-3';
Lig4-F: 5'-TCTGCCTTTAAGCCAATGCT-3',
Lig4-R: 5'-GTGAGAGAGCCTTCCTGTGG-3';
XRCC4-F: 5'-TGTGTGAGTGCCAAAGAAGC,
XRCC4-R: TCATCGGTGCTTCCATCATA-3';
Lig3-F: 5'-CCTCTCCAAGCTCACCAAAG-3',
Lig3-R: 5'-TGCTCATTGTGAAGGACTCG-3';
PARP1-F: 5'-GCAGCGAGAGTATTCCCAAG-3',
PARP1-R: 5'-CCGTCTTCTTGACCTTCTGC-3';
Rag1-F: 5'-CTGGAGAGCCCAGTGAAGTC-3',
Rag1-R: 5'-TCGTCAGTGACAGGAGATGC-3';
Rag2-F: 5'-TTAATTCCTGGCTTGGCCG-3' and
Rag2-R: 5'-TTCCTGCTTGTGGATGTGAAAT-3';
mS16-F: 5'-TGTTCC TACCCCAATGTGT-3',
mS16-R 5'-TGTGAGGGAGATGCTCAGTG-3'.

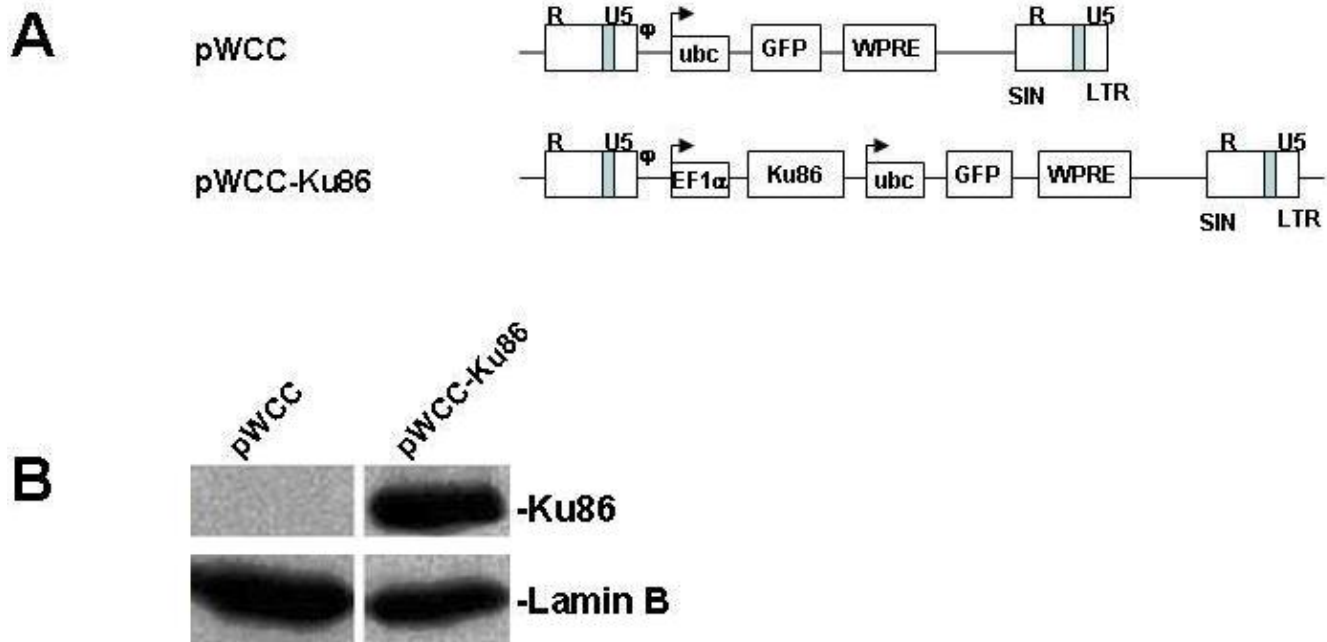



Figure S1. Ku86 cDNA was constructed into pWCC lentiviral vector. (A) Schematic diagrams of the dual-promoter Ku86 lentiviral vectors used in these studies. Human Ku86 cDNA was inserted into pWCC vector under control of the EF1 α promoter and upstream of Ubiquitin-GFP. Transcripts from sin LVs with single or dual internal promoters are denoted with arrows. R and U5, the repeat and U5 region in the viral LTR; WPRE, woodchuck post-transcriptional regulatory element; EF1 α , the human EF1 α promoter/enhancer; Ubc, the human ubiquitin promoter; GFP, enhanced green fluorescence protein. (B) Western blotting analysis demonstrates expression of Ku86 in pWCC-Ku86 transduced but not pWCC vector-alone transduced 293T cells.

>ref|NT_109320.4|Hm5_108190_37  Mus musculus chromosome 5 genomic contig, strain C57BL/6J
Length=37423115

Features in this part of subject sequence:
progesterin and adipoQ receptor family member 3

Score = 684 bits (370), Expect = 0.0
Identities = 370/370 (100%), Gaps = 0/370 (0%)
Strand=Plus/Minus

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Query 271      TGAACTCGTGAACCTGACATCAGTGACGGTTTGCCCTGTGATGGATGCATTGGCAGGAAT 330
Sbjct 21004831 TGAACTCGTGAACCTGACATCAGTGACGGTTTGCCCTGTGATGGATGCATTGGCAGGAAT 21004772
Query 331      TGTCCCCGACTTGTAGGTCCTGCGGGGGTCTAAGCCGTAGCCCTGAGCACCATCCATGGA 390
Sbjct 21004771 TGTCCCCGACTTGTAGGTCCTGCGGGGGTCTAAGCCGTAGCCCTGAGCACCATCCATGGA 21004712
Query 391      TTGCTCAGCTCTCCGTTTTTCACCCCTTCGTTCTTACGGCCCTGCTTTTTCTTTTGTAGGTC 450
Sbjct 21004711 TTGCTCAGCTCTCCGTTTTTCACCCCTTCGTTCTTACGGCCCTGCTTTTTCTTTTGTAGGTC 21004652
Query 451      GCATGCTTTGCTCGGTGGGCTATCATCTTTTTTCTGTCATCGGTCAGAAAAAACTTGTCT 510
Sbjct 21004651 GCATGCTTTGCTCGGTGGGCTATCATCTTTTTTCTGTCATCGGTCAGAAAAAACTTGTCT 21004592
Query 511      GGAGATGGATGGCATTGGATTATGCAGGAATTTCTATTGGAATACTGGGCTGCTATGTC 570
Sbjct 21004591 GGAGATGGATGGCATTGGATTATGCAGGAATTTCTATTGGAATACTGGGCTGCTATGTC 21004532
Query 571      CAGGAGTATTTTATGCATTTTATTGCAATAATGTAAGTGCTTAGAACTTTCACACTCTAT 630
Sbjct 21004531 CAGGAGTATTTTATGCATTTTATTGCAATAATGTAAGTGCTTAGAACTTTCACACTCTAT 21004472
Query 631      CTTCTGATAG 640
Sbjct 21004471 CTTCTGATAG 21004462
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Figure S2. An example of chromosomal DNA translocated into repaired PUC18 plasmid. DNA was extracted from a white (misrepaired) colony from linearized PUC18-transfected FLT3/ITD early Pro-B cells and subjected to sequencing. BLAST program from NCBI web site was used for sequence alignment.